

## **REMARKS/ARGUMENTS**

The Applicants have carefully considered this application in connection with the Examiner's Action and respectfully request reconsideration of this application in view of the following remarks.

Presently, the Applicants have amended dependent Claim 55, however, the Applicants have neither amended, canceled nor added any other claims. Accordingly, Claims 41-50, 52-53, 55-67, 69 and 70 are currently pending in the application.

### **I. Formal Matters and Objections**

The Examiner has objected to Claim 55 as containing informalities; namely various typographical or grammatical errors. In response, the Applicants have amended Claim 55 to correct this inadvertent error. The Applicants appreciate the Examiner's diligence in finding and bringing this error to their attention.

### **II. Rejection of Claims 41-42, 47, 52, 55, 58-59, 64 and 69 under 35 U.S.C. §102**

The Examiner has rejected Claims 41-42, 47, 52, 55, 58-59, 64 and 69 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 3,852,633 to Hunter ("Hunter"). Independent Claims 41 and 58 currently include the element of at least one lens array placed within a drift space. The present invention, as detailed on page 4, lines 15-30, of the application as filed, defines drift space to be a region where no or substantially no electric field is present. The present invention goes on to say that the absence of the electric field in the drift space provides for no acceleration of the electrons.

Hunter, in contrast, is directed to a gridded electron gun. (Title) As shown in FIG.1, and discussed in the related text, Hunter requires that a control grid 12 be placed between a cathode emitter 2 and an anode disk 6. Specifically, Hunter teaches that the control grid 12 is only placed about 0.039 inches away from the cathode emitter 2, and between the cathode emitter 2 and the anode disk 6. As those skilled in the art are aware, the space between the cathode emitter 2 and the anode disk 6 contains a substantial electric field that creates an acceleration space for the electrons to accelerate from the cathode emitter 2 to the front surface of the anode disk 6. Because the space where Hunter's control grid 12 is located contains a substantial electrical field, it provides for a substantial amount of acceleration of the electrons therein. Accordingly, the control grid 12 of Hunter is not located within the drift space, as claimed and defined by the present invention, but is located in an acceleration space.

Therefore, Hunter does not disclose each and every element of the claimed invention and as such, is not an anticipating reference. Because Claims 42, 47, 52, 55, 59, 64 and 69 are dependent upon Claims 41 and 58, Hunter also cannot be an anticipating reference for Claims 42, 47, 52, 55, 59, 64 and 69. Accordingly, the Applicants respectfully request the Examiner to withdraw the §102 rejection with respect to these Claims.

### **III. Rejection of Claims 49, 56-57, and 66 under 35 U.S.C. §103**

The Examiner has rejected Claims 49, 56-57, and 66 under 35 U.S.C. §103(a) as being unpatentable over Hunter. The Applicants established above that Hunter fails to disclose the element that at least one lens array is placed in a drift space. Given the detailed teaching of Hunter that its control grid 12 be placed directly in the acceleration space, which is opposite to being placed in the

drift space, Hunter also fails to suggest this element.

Thus Hunter fails to teach or suggest the invention recited in independent Claims 41 and 58 and their dependent claims, when considered as a whole. Accordingly, the reference fails to establish a prima facie case of obviousness with respect to those claims. Claims 49, 56-57, and 66 are therefore not obvious in view of Hunter.

In view of the foregoing remarks, the cited references do not support the Examiner's rejection of Claims 49, 56-57, and 66 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

#### **IV. Allowable Subject Matter**

The Examiner has indicated that Claims 43-46, 50, 60-63 and 67 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. While the Applicants agree with the Examiner that Claims 43-46, 50, 60-63 and 67 contain allowable subject matter, the Applicants also strongly believe that independent Claims 41 and 58 currently contain allowable subject matter. Accordingly, the Applicants are choosing not to role the elements of the allowed claims into their respective independent Claims. Nevertheless, the Applicants reserve the right to do so in the future if they feel the desire to do so.

**V. Conclusion**

In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 41-50, 52-53, 55-67, 69 and 70.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present application.

Respectfully submitted,

HITT GAINES, PC

A handwritten signature in black ink, appearing to read 'Greg H. Parker', is written over the printed name.

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